



EXHIBIT A

SEQ5	1	MAFWTQMLLLLWKNFMYRRRQPVQLLVELLWPLFLFFILVAVRHSHPPLE	50
SEQ6	1	PPLE	4

SEQ5	51	HHECHFPNKPLPSAGTVPWLQGLICNVNNTCFPQLTPGEEPGRLSNFNDS	100
SEQ6	5	HHECHFPNKPLPSAGTVPWLQGLICNVNNTCFPQLTPGEEPGRLSNFNDS	54

SEQ5	101	LVSRLADARTVLGGASAHRTLGLGKLIATLRAARSTAQPQPTKQSPLE	150
SEQ6	55	LVSRLADARTVLGGASAHRTLGLGKLIATLRAARSTAQPQPTKQSPLE	104

SEQ5	151	PPMLDVAELLTSLLRTESLGLALGQAQEPLHSLLEAAEDLAQELLALRSL	200
SEQ6	105	PPMLDVAELLTSLLRTESLGLALGQAQEPLHSLLEAAEDLAQELLALRSL	154

SEQ5	201	VELRALLQRPRTSGPLELLSEALCSVRGPSSTVGPSLNWYEASDLMELV	250
SEQ6	155	VELRALLQRPRTSGPLELLSEALCSVRGPSSTVGPSLNWYEASDLMELV	204

SEQ5	251	GQEPESALPDSSSLPACSELIGALDSHPLSRLLRRLKPLILGKLLFAPD	300
SEQ6	205	GQEPESALPDSSSLPACSELIGALDSHPLSRLLRRLKPLILGKLLFAPD	254

SEQ5	301	TPFTRKLMAQVNRTFEELTLLRDVREVWEMLGPRIFTFMNDSSNVAMLQR	350
SEQ6	255	TPFTRKLMAQVNRTFEELTLLRDVREVWEMLGPRIFTFMNDSSNVAMLQR	304

SEQ5	351	LLQMQDEGRRQPRPGGRDHMEALRSFLDPGSGGYSWQDAHADVGHVGL	400
SEQ6	305	LLQMQDEGRRQPRPGGRDHMEALRSFLDPGSGGYSWQDAHADVGHVGL	354

SEQ5	401	GRVTECLSLDKLEAAPSEAALVSRAQLLAEHRFWAGVVFLGPEDSSDPT	450
SEQ6	355	GRVTECLSLDKLEAAPSEAALVSRAQLLAEHRFWAGVVFLGPEDSSDPT	404

SEQ5	451	EHPTPDLGPGHVRIKIRMDIDVVTRTNKIRDRFWDPGPAADPLTDLRYVW	500
SEQ6	405	EHPTPDLGPGHVRIKIRMDIDVVTRTNKIRDRFWDPGPAADPLTDLRYVW	454

SEQ5	501	GGFVYLQDLVERAAVRVLSGANPRAGLYLQQMPYPCYVDDVFLRVLSRSL	550
SEQ6	455	GGFVYLQDLVERAAVRVLSGANPRAGLYLQQMPYPCYVDDVFLRVLSRSL	504

SEQ5	551	PLFLTALWIYSVTITVKAVVREKETRLRDTMRAMGLSRAVLWLGWFLSCL	600
SEQ6	505	PLFLTALWIYSVTITVKAVVREKETRLRDTMRAMGLSRAVLWLGWFLSCL	554

SEQ5	601	GPFLLSAALLVVLKLGDLIPYSHPGVVFLFLAAFAVATVTQSFLLSAFF	650
SEQ6	555	GPFLLSAALLVVLKLGDLIPYSHPGVVFLFLAAFAVATVTQSFLLSAFF	604

SEQ5	651	SRANLAAACGGLAYFSLYLPYVLCVAWRDRLPAGGRVAASLLSPVAFGFG	700
SEQ6	605	SRANLAAACGGLAYFSLYLPYVLCVAWRDRLPAGGRVAASLLSPVAFGFG	654

SEQ5	701	CESLALLEEQGEGAQWHNVGTRPTADVFSLAQVSGLLLLDAALYGLATWY	750
SEQ6	655	CESLALLEEQGEGAQWHNVGTRPTADVFSLAQVSGLLLLDAALYGLATWY	704

SEQ5	751	LEAVCPGQYGIPEPWNFPFRRSYWCGRPPKSPAPCPTPLDPKVLVEEAP	800
SEQ6	705	LEAVCPGQYGIPEPWNFPFRRSYWCGRPPKSPAPCPTPLDPKVLVEEAP	754

SEQ5	801	PGLSPGVSVRSLEKRFPGPSQPALRGLSLDFYQGHITAF LGHNGAGKTTT	850
SEQ6	755	PGLSPGVSVRSLEKRFPGPSQPALRGLSLDFYQGHITAF LGHNGAGKTTT	804

SEQ5	851	LSILSGLFPPSGGSAFILGHDVRSSMAAIRPHLGVC PQYNVLFDM LTVDE	900
SEQ6	805	LSILSGLFPPSGGSAFILGHDVRSSMAAIRPHLGVC PQYNVLFDM LTVDE	854

SEQ5	901	HVWFYGR LKGLSAAVVGPEQDRLLQDVGLVSKQSVQTRHLSGGMQRKLSV	950
SEQ6	855	HVWFYGR LKGLSAAVVGPEQDRLLQDVGLVSKQSVQTRHLSGGMQRKLSV	904

SEQ5	951	AIAFVGGSQVVILDEPTAGVDPASRRGIWELLLKYREGRTLILSTHHLDE	1000
SEQ6	905	AIAFVGGSQVVILDEPTAGVDPASRRGIWELLLKYREGRTLILSTHHLDE	954

SEQ5	1001	AEL LGDRVAVVAGGRLCCCGSPLFLRRHLGSGYYLTLVKARLPLTTNEKA	1050
SEQ6	955	AEL LGDRVAVVAGGRLCCCGSPLFLRRHLGSGYYLTLVKARLPLTTNEKA	1004

SEQ5	1051	DTDMEGSVDTRQEKKNQSQGSRVGTPQLLALVQHWVPGARLVEELPHEL V	1100
SEQ6	1005	DTDMEGSVDTRQEKKNQSQGSRVGTPQLLALVQHWVPGARLVEELPHEL V	1054

SEQ5	1101	LVL PYTG AHDG SFATL FREL DTR LAELRLTGYGISDTSLEE IFLKVVEEC	1150
SEQ6	1055	LVL PYTG AHDG SFATL FREL DTR LAELRLTGYGISDTSLEE IFLKVVEEC	1104

SEQ5	1151	AADTDMEDGSCGQHLCTGIAGLDVTLRLKMPPQETALENGEPAGSAPETD	1200
SEQ6	1105	AADTDMEDGSCGQHLCTGIAGLDVTLRLKMPPQETALENGEPAGSAPETD	1154

SEQ5	1201	QGS GPDAVGRVQGWALTRQQLQALLLKRFL LARRSRRGLFAQIVLPALFV	1250
SEQ6	1155	QGS GPDAVGRVQGWALTRQQLQALLLKRFL LARRSRRGLFAQIVLPALFV	1204

SEQ5	1251	GLALVFSLIVPPFGHY PALRLSPTMYGAQVSFFSEDAPGDPGRARLLEAL	1300
SEQ6	1205	GLALVFSLIVPPFGHY PALRLSPTMYGAQVSFFSEDAPGDPGRARLLEAL	1254

SEQ5	1301	LQEAGLEPPVQHSSHRSAP EVPAEVAKV LASGNWTPESPSPACQCSQP	1350
SEQ6	1255	LQEAGLEPPVQHSSHRSAP EVPAEVAKV LASGNWTPESPSPACQCSQP	1304

SEQ5 1351 GARRLLPDCPAAAGGPPPPQAVTGSSEVVQNL TGRNLSDFLVKTYPRLVR 1400
 SEQ6 1305 GARRLLPDCPAAAGGPPPPQAVTGSSEVVQNL TGRNLSDFLVKTYPRLVR 1354

SEQ5 1401 QGLKTKKWVNEVRYGGFSLGGRDPGLPSGQELGRSVEELWALLSPLPGGA 1450
 SEQ6 1355 QGLKTKKWVNEVRYGGFSLGGRDPGLPSGQELGRSVEELWALLSPLPGGA 1404

SEQ5 1451 LDRV LKNLTAWAHS LDAQDSLKIWFNNKGWHS MVAFVNRASNAILRAHLP 1500
 SEQ6 1405 LDRV LKNLTAWAHS LDAQDSLKIWFNNKGWHS MVAFVNRASNAILRAHLP 1454

SEQ5 1501 PGP ARHAHSITTLNHPLNLTKEQLSEAALMASSVDVLVSICVVFAMSFVP 1550
 SEQ6 1455 PGP ARHAHSITTLNHPLNLTKEQLSEAALMASSVDVLVSICVVFAMSFVP 1504

SEQ5 1551 ASFTLV LIEERVTRAKHLQLMGGLSPTLYWLG NFLWDMCNYLV PACIVVL 1600
 SEQ6 1505 ASFTLV LIEERVTRAKHLQLMGGLSPTLYWLG NFLWDMCNYLV PACIVVL 1554

SEQ5 1601 IFLAFQQRAYVAPANLPALLLLLLLLYGWSITPLMPASFFFSVPSTAYVV 1650
 SEQ6 1555 IFLAFQQRAYVAPANLPALLLLLLLLYGWSITPLMPASFFFSVPSTAYVV 1604

SEQ5 1651 LTCINLFIGINGSMATFVLELFS DQKLQEVSRILKQVFLIFPHFCLGRGL 1700
 SEQ6 1605 LTCINLFIGINGSMATFVLELFS DQKLQEVSRILKQVFLIFPHFCLGRGL 1654

SEQ5 1701 IDMVRNQAMADA FERLGDRQFQSPLRWEVV GKNLLAMVIQG PLFLLFTLL 1750
 SEQ6 1655 IDMVRNQAMADA FERLGDRQFQSPLRWEVV GKNLLAMVIQG PLFLLFTLL 1704

SEQ5 1751 LQHRSQ LLPQPRVRS LPLLGE EDEDVARERERVVQ GATQGDVLVLRNLTK 1800
 SEQ6 1705 LQHRSQ LLPQPRVRS LPLLGE EDEDVARERERVVQ GATQGDVLVLRNLTK 1754

SEQ5 1801 VYRGQRMPAVDR LCLGIPPGE CFGLLG VNGAGKTSTFRMVTGDTLASRGE 1850
 SEQ6 1755 VYRGQRMPAVDR LCLGIPPGE CFGLLG VNGAGKTSTFRMVTGDTLASRGE 1804

SEQ5 1851 AVLAGHSVAREPSAAHLSMGYCPQSDAIFELLTGREHLELLARLRGVPEA 1900
 SEQ6 1805 AVLAGHSVAREPSAAHLSMGYCPQSDAIFELLTGREHLELLARLRGVPEA 1854

SEQ5 1901 QVAQTAGSGLARLGLSWYADRPAGTYSGGNKRKLATALALVGDP AVVFLD 1950
 SEQ6 1855 QVAQTAGSGLARLGLSWYADRPAGTYSGGNKRKLATALALVGDP AVVFLD 1904

SEQ5 1951 EPTTGMDPSARRFLWNSLLAVVREGRSVMLTSHSMEECEALCSRLAIMVN 2000
 SEQ6 1905 EPTTGMDPSARRFLWNSLLAVVREGRSVMLTSHSMEECEALCSRLAIMVN 1954

SEQ5 2001 GRFRCLGSPQHLKGRFAAGHTLT LRVPAARSQPAAAFVAAEFPGSELREA 2050
 SEQ6 1955 GRFRCLGSPQHLKGRFAAGHTLT LRVPAARSQPAAAFVAAEFPGSELREA 2004

SEQ5 2051 HGGRLRFQLPPGGRCALARVFGELAVHGAEHGVEDFSVSQTMLEEVFLYF 2100
SEQ6 2005 HGGRLRFQLPPGGRCALARVFGELAVHGAEHGVEDFSVSQTMLEEVFLYF 2054

SEQ5 2101 SKDQGKDEDTEEQKEAGVGVDPAAPGLQHPKRVSQFLDDPSTAETVL 2146
SEQ6 2055 SKDQGKDEDTEEQKEAGVGVDPAAPGLQHPKRVSQFLDDPSTAETVL 2100

EXHIBIT B

SEQ6	1	PPLEHHECHFPNKPLPSAGTVPWLQGLICNVNNTCFPQLTPGEEPGRLSN	50
SEQ8	1		0
SEQ6	51	FNDLSVSRLLADARTVLGGASAHRTLGLGKLIATLRAARSTAQPQPTKQ	100
SEQ8	1	MVCLGTGQSAGPLVSVQNHCPPCGLS-	26
		* * . * . . *	
SEQ6	101	SPLEPPMLDVAELLTSLRRTESLGLALGQAQEPLHSLLEAAEDLAQELLA	150
SEQ8	27	-PQ-----ESLGLALGQAQEPLHSLLEAAGDLAQELLA	58
		* *****	
SEQ6	151	LRSLVELRALLQRPRGTSGPLELLSEALCSVRGPSSTVGPSLNWYEASDL	200
SEQ8	59	LRSLVELRALLQRPRGTSGPLELLSEALCSVRGPSSTVGPSLNWYEASDL	108

SEQ6	201	MELVGQEPESALPDSSSLSPACSELIGALDSHPLSRLLWRRRLKPLILGKLL	250
SEQ8	109	MELVGQEPESALPDSSSLSPACSELIGALDSHPLSRLLWRRRLKPLILGKLL	158

SEQ6	251	FAPDTPFTRKLMAQVNRTFEELTLLRDVREVWEMLGPRIFTFMNDSSNVA	300
SEQ8	159	FAPDTPFTRKLMAQVNRTFEELTLLRDVREVWEMLGPRIFTFMNDSSNVA	208

SEQ6	301	MLQRLLQMDEGRRQPRPGGRDHMEALRSFLDPGSGGYSWQDAHADVGH	350
SEQ8	209	MLQRLLQMDEGRRQPRPGGRDHMEALRSFLDPGSGGYSWQDAHADVGH	258

SEQ6	351	VGTLGRVTECLSLDKLEAAPSEAAALVSRAQLLAEHRFWAGVVFLGPEDS	400
SEQ8	259	VGTLGRVTECLSLDKLEAAPSEAAALVSRAQLLAEHRFWAGVVFLGPEDS	308

SEQ6	401	SDPTEHPTPDLGPGHVRIKIRMDIDVVTRTNKIRDRFWDPGPAADPLTDL	450
SEQ8	309	SDPTEHPTPDLGPGHVRIKIRMDIDVVTRTNKIRDRFWDPGPAADPLTDL	358

SEQ6	451	RYVWGGFVYVLQDLVERAAVRVLSGANPRAGLYLQQMPYPCYVDDVFLRV	500
SEQ8	359	RYVWGGFVYVLQDLVERAAVRVLSGANPRAGLYLQQMPYPCYVDDVFLRV	408

SEQ6	501	SRSPLPLFTLAWIYSVTLTVKAVVREKETRLRDTMRAMGLSRAVLWLWGF	550
SEQ8	409	SRSPLPLFTLAWIYSVTLTVKAVVREKETRLRDTMRAMGLSRAVLWLWGF	458

SEQ6	551	LSCLGPFLLSAALLVLVLKLGDIPLPYSHPGVVFLFLAAFAVATVTQSFL	600
SEQ8	459	LSCLGPFLLSAALLVLVLKLGDIPLPYSHPGVVFLFLAAFAVATVTQSFL	508

SEQ6	601	SAFFSRANLAAACGGLAYFSLYLPYVLCVAWRDRLPAGGRVAASLLSPVA	650
SEQ8	509	SAFFSRANLAAACGGLAYFSLYLPYVLCVAWRDRLPAGGRVAASLLSPVA	558

SEQ6	651	FGFGCESLALLEEQGEGAQWHNVGTRPTADVFSLAQVSGLLLLDAALYGL	700
SEQ8	559	FGFGCESLALLEEQGEGAQWHNVGTRPTADVFSLAQVSGLLLLDAALYGL	608

SEQ6	701	ATWYLEAVCPGQYGIPEPWNFPFRRSYWCGPRPPKSPAPCPTPLDPKVLV	750
SEQ8	609	ATWYLEAVCPGQYGIPEPWNFPFRRSYWCGPRPPKSPAPCPTPLDPKVLV	658

SEQ6	751	EEAPPGLSPGVSVRSLEKRFPGPSQPALRGLSLDFYQGHITAF LGHNAG	800
SEQ8	659	EEAPPGLSPGVSVRSLEKRFPGPSQPALRGLSLDFYQGHITAF LGHNAG	708

SEQ6	801	KTTTLSILSGLFPPSGGSFILGHDVRSSMAAIRPHLGVC PQYNVLF DML	850
SEQ8	709	KTTTLSILSGLFPPSGGSFILGHDVRSSMAAIRPHLGVC PQYNVLF DML	758

SEQ6	851	TVDEHVWFYGR LKGLSAAVVGPEQDRLLQDVGLVSKQSVQTRHLSGGMQR	900
SEQ8	759	TVDEHVWFYGR LKGLSAAVVGPEQDRLLQDVGLVSKQSVQTRHLSGGMQR	808

SEQ6	901	KLSVAIAFVGGSQVVILDEPTAGVDPASRRGIWELLLKYREGRTLILSTH	950
SEQ8	809	KLSVAIAFVGGSQVVILDEPTAGVDPASRRGIWELLLKYREGRTLILSTH	858

SEQ6	951	HLDEAELLGDRVAVVAGGRLCCCGSPLFLRRHLGSGYYLTLVKARLPLTT	1000
SEQ8	859	HLDEAELLGDRVAVVAGGRLCCCGSPLFLRRHLGSGYYLTLVKARLPLTT	908

SEQ6	1001	NEKADTDMEGSVDTRQEKKNGSQGSRVGT PQLLALVQHWVPGARLVEELP	1050
SEQ8	909	NEKADTDMEGSVDTRQEKKNGSQGSRVGT PQLLALVQHWVPGARLVEELP	958

SEQ6	1051	HELVLVLPYTGAHDGSFATLFRELDTRLAELRLTG YGISDTSLEEIFLKV	1100
SEQ8	959	HELVLVLPYTGAHDGSFATLFRELDTRLAELRLTG YGISDTSLEEIFLKV	1008

SEQ6	1101	VEECAADTDMEDGSCGQHLCTGIAGLDVTLRLKMP PQETALENGEPAGSA	1150
SEQ8	1009	VEECAADTDMEDGSCGQHLCTGIAGLDVTLRLKMP PQETALENGEPAGSA	1058

SEQ6	1151	PETDQSGSPDAVGRVQGWALTRQQ LQALLKRFLLARRSRRGLFAQIVLP	1200
SEQ8	1059	PETDQSGSPDAVGRVQGWALTRQQ LQALLKRFLLARRSRRGLFAQIVLP	1108

SEQ6	1201	ALFVGLALVFSLIVPPFGHYPALRLSPTMYGAQVSFFSEDAPGDPGRARL	1250
SEQ8	1109	ALFVGLALVFSLIVPPFGHYPALRLSPTMYGAQVSFFSEDAPGDPGRARL	1158

SEQ6	1251	LEALLQEAGLEPPVQHSSHRFSAPEVPAEVAKVLASGNWTPESPSPACQ	1300
SEQ8	1159	LEALLQEAGLEPPVQHSSHRFSAPEVPAEVAKVLASGNWTPESPSPACQ	1208

SEQ6	1301	CSQPGARRLLPDCPAAAGGPPPPQAVTGSGEVVQNL TGRNLSDFLVK TYP	1350
SEQ8	1209	CSQPGARRLLPDCPAAAGGPPPPQAVTGSGEVVQNL TGRNLSDFLVK TYP	1258

SEQ6 1351 RLVROGLKTKKWVNEVRYGGFSLGGRDPGLPSGQELGRSVEELWALLSPL 1400
 SEQ8 1259 RLVROGLKTKKWVNEVRYGGFSLGGRDPGLPSGQELGRSVEELWALLSPL 1308

SEQ6 1401 PGGALDRVLKNLTAWAHSLDAQDSLKIWFNNKGWHSMAFVNRAASNAILR 1450
 SEQ8 1309 PGGALDRVLKNLTAWAHSLDAQDSLKIWFNNKGWHSMAFVNRAASNAILR 1358

SEQ6 1451 AHLPPGPARHAHSITTLNHPLNLTKEQLSEAALMASSVDVLVSICVVFAM 1500
 SEQ8 1359 AHLPPGPARHAHSITTLNHPLNLTKEQLSEAALMASSVDVLVSICVVFAM 1408

SEQ6 1501 SFVPASFTLVLIEERVTRAKHLQLMGGLSPTLYWLGNFLWDMCNYLVPAC 1550
 SEQ8 1409 SFVPASFTLVLIEERVTRAKHLQLMGGLSPTLYWLGNFLWDMCNYLVPAC 1458

SEQ6 1551 IVVLIFLAFQQRAYVAPANLPALLLLLLLYGWSITPLMYPASFFFSVPST 1600
 SEQ8 1459 IVVLIFLAFQQRAYVAPANLPALLLLLLLYGRQAVPVTALGGGRQEP-- 1506
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SEQ6 1601 AYVVLTCINLFIGINGSMATFVLELFSQKLQEVSRILKQVFLIFPHFCL 1650
 SEQ8 1507 ----- 1506

SEQ6 1651 GRGLIDMVRNQAMADAFERLGDRQFQSPLRWEVVGKNLLAMVIQGPLFLL 1700
 SEQ8 1507 ----- 1506

SEQ6 1701 FTLLLQHRSQLLPQPRVRSPLLGEEDEDVARERERVVQATQGDVLVLR 1750
 SEQ8 1507 ----LGHGDTGAPLP----- 1517
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SEQ6 1751 NLTKVYRGQRMPAVDRLCLGIPPGECFGLLGVNGAGKTSTFRMVTGDTLA 1800
 SEQ8 1518 ----- 1517

SEQ6 1801 SRGEAVLAGHSVAREPSAAHLSMGYCPQSDAIFELLTGREHLELLARLRG 1850
 SEQ8 1518 ----- 1517

SEQ6 1851 VPEAQVAQTAGSGLARLGLSWYADRPAGTYSGGNKRKLATALALVGDPVAV 1900
 SEQ8 1518 ----- 1517

SEQ6 1901 VFLDEPTTGMDPSARRFLWNSLLAVVREGRSVMLTSHSMEECEALCSRLA 1950
 SEQ8 1518 ----- 1517

SEQ6 1951 IMVNGRFRCLGSPQHLKGRFAAGHTLTLRVPAARSQPAAAFVAAEFPGSE 2000
 SEQ8 1518 -----SLHTTAAAPKPTPATAQGEVSATP 1541
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SEQ6 2001 LREAHGGRLRFQLPPGGRCALARVFGELAVHGAEHGVEDFSVSQTMLEEV 2050
 SEQ8 1542 GRGGRGCSP 1550
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SEQ6 2051 FLYFSKDQKDEDTEEQKEAGVGVDPAAGLQHPKRVSQFLDDPSTAETVL 2100

SEQ2	648	SRANLAAACGGLAYFALYLPYVLCVAWRERLHLGGLLAASLLSPVAFGFG	697
SEQ5	651	SRANLAAACGGLAYFSLYLPYVLCVAWRDRLPAGGRVAASLLSPVAFGFG	700
		*****.*****.*** ** .*****	
SEQ2	698	CESLALLEEQGDGAQWHNLGTGPAEDVFSLAQVSAFLLLDVAVIYGLALWY	747
SEQ5	701	CESLALLEEQGEGAQWHNVGTRPTADVFSLAQVSGLLLLDAALYGLATWY	750
		*****.*****.*** *. ***** ***** .***** **	
SEQ2	748	LEAVCPGQYGIPEPWNFPFRRSYWCGPGPPKSSVLAPAPQDPKVLVEEPP	797
SEQ5	751	LEAVCPGQYGIPEPWNFPFRRSYWCGPRPPKSPAPCPTPLDPKVLVEEAP	800
		*****.*****.***** ***** .*. ***** *	
SEQ2	798	LGLVPGVSIRGLKKHFRGCPQPALQGLNLDIFYEGHITAFLGHNGAGKTTT	847
SEQ5	801	PGLSPGVSVRSLEKRFPSPQPALRGLSLDFYQGHITAFLGHNGAGKTTT	850
		** *****. * * *. * *.*****.*** *****.*****.*****	
SEQ2	848	LSILSGLFPPSSGSASILGHDVQTNMAAIRPHLGICPQYNVLFDMLTVEE	897
SEQ5	851	LSILSGLFPPSSGSFILGHDVRSSMAAIRPHLGVCQYNVLFDMLTVDE	900
		***** ***** *****. . *****.*****.*****. *	
SEQ2	898	HVWFYGRLLKGVSAAMGPERERLIRDVGLTLKRDQTQTRHLSGGMQRKLSV	947
SEQ5	901	HVWFYGRLLKGLSAAVVGPEQDRLLQDVGLVSKQSVQTRHLSGGMQRKLSV	950
		*****.*** .***.***.***** *. *****.*****	
SEQ2	948	AIAFVGGSRVVIMDEPTAGVDPASRRGIWELLKYREGRTLILSTHHLDE	997
SEQ5	951	AIAFVGGSQVVILDEPTAGVDPASRRGIWELLKYREGRTLILSTHHLDE	1000
		*****.***.*****.*****.*****.*****.*****	
SEQ2	998	AELGDRVAMVAGGSLCCCGSPLFLRRHLGCGYYLTLVKSSQSLVTHDAK	1047
SEQ5	1001	AELGDRVAVVAGGRLCCCGSPLFLRRHLGSGYYLTLVKARLPLTTNEKA	1050
		*****.***** *****.*****.*****. ***** * ..	
SEQ2	1048	GSEDPRREKKS DGNRTSDTAFTRGTS DKS NQAPAPGAVPITPSTARIL	1097
SEQ5	1051	DTDMEGSV DTRQE-----KKN-----GSQGS RVGTPQLL	1079
		. . . * * * . * ..	
SEQ2	1098	ELVQQHVPGAQLVEDLPHELLLVLPYAGALDGSFAMVFQELDQQLLELLGL	1147
SEQ5	1080	ALVQHWVPGARLVEELPHELLLVLPYTGADGSGFATLFRELDTRLAELRL	1129
		. *.***.*****.*****.*** ***** .*.*** * *	
SEQ2	1148	TGYGISDTNLEEIFLKVVEDAHREGGDSRPQLHLRTCTPQP-----P	1189
SEQ5	1130	TGYGISDTSLEEIFLKVVEECAADTDMEDGSCGQHLCTGIAGLDVTLRLK	1179
		***** *****. . . **	
SEQ2	1190	TGPEASVLENGELAKLVLDPAQAPQGLAP-NAAQVQGWTLTCQQLRALLHK	1238
SEQ5	1180	MPPQETALENGEPAG--SAPETDQSGPD AVGRVQGWALTRQQLQALLK	1227
		*. . ***** * *. * * .*****.*** ***** *	
SEQ2	1239	RFL LARRSRRGLFAQVVLPAFLVGLALFFSLIVPPFGQYPPLQLSPAMYG	1288
SEQ5	1228	RFL LARRSRRGLFAQIVLPAFLVGLALVFSLIVPPFGHYPALRLSPTMYG	1277
		*****.***** *****.*****.*** *.***.***	
SEQ2	1289	PQVSFFSEDAPGDPNRMKLEALLGEAGLQEPSMQDKDARGSECTHSLAC	1338
SEQ5	1278	AQVSFFSEDAPGDPGRARLLEALLQEAGLEPPVQHSSHR-----	1317
		*****.*** .***** *****.*** * *	

SEQ2 1339 YFTVPEVPPDVASILASGNWTPESPSPACQCSQPGARRLLPDCPAGAGGP 1388
 SEQ5 1318 -FSAPEVPAEVAKVLASGNWTPESPSPACQCSQPGARRLLPDCPAAAGGP 1366
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SEQ2 1389 PPPQAVAGLGEVVQNLGTGRNVSDFLVKTYPSLVRRGLKTKKWVDEVRYGG 1438
 SEQ5 1367 PPPQAVTGSGEVVQNLGTGRNLSDFLVKTYPRLVRQGLKTKKWVNEVRYGG 1416
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SEQ2 1439 FSLGGRDPDLPTGHEVVRTLAEIRALLSPQPGNALDRILNNLTQWALGLD 1488
 SEQ5 1417 FSLGGRDPGLPSGQELGRSVEELWALLSPLPGGALDRVLKNLTAWAHSLD 1466
 ***** **.*.*. *.. *. ***** **.******. * ** ** *

SEQ2 1489 ARNSLKIWFNNKGWHAMVAFVNRANGLLHALLPSGPVRHAHSITTLNHP 1538
 SEQ5 1467 AQDSLKIWFNNKGWHSMVAFVNRASNAILRAHLPPGPARHAHSITTLNHP 1516
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SEQ2 1539 LNLTKQLSEATLIASSVDVLVSICVVFAMSFVPASFTLVLIEERITRAK 1588
 SEQ5 1517 LNLTKQLSEAALMASSVDVLVSICVVFAMSFVPASFTLVLIEERVTRAK 1566
 *****.*.*****.*****.*****

SEQ2 1589 HLQLVSGLPQTLTYWLG NFLWDMCNYLVAVCIVVFIFLAFQQRAYVAPENL 1638
 SEQ5 1567 HLQLMGGLSPTLYWLG NFLWDMCNYLPACIVVLI FLAFQQRAYVAPANL 1616
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SEQ2 1639 PALLLLLLLYGWSITPLMPASFFFSVPSTAYVVLTCINLFIGINSSMAT 1688
 SEQ5 1617 PALLLLLLLYGWSITPLMPASFFFSVPSTAYVVLTCINLFIGINGSMAT 1666

SEQ2 1689 FVLELLSDQNLQEVSRILKQVFLIFPHFCLGRGLIDMVRNQAMADAFERL 1738
 SEQ5 1667 FVLELFSDQKLQEVSRILKQVFLIFPHFCLGRGLIDMVRNQAMADAFERL 1716
 ***** ** *****

SEQ2 1739 GDKQFQSPLRWDIIGKNLLAMMAQGFLFLITLLLQHRNRLLPQSKPRLL 1788
 SEQ5 1717 GDRQFQSPLRWEVVGKNLLAMVIQGFLFLFTLLLQHRSQLLPQPRVRS 1766
 .***.*****. ***** ***** .**** . * *

SEQ2 1789 PPLGEEDEDVAQERERVTKGATQGDVLVLRDLTKVYRGQRNPAVDRLCLG 1838
 SEQ5 1767 PLLGEEDEDVARERERVVQATQGDVLVLRNLTKVYRGQRMPAVDRLCLG 1816
 * *****.***** .***** ***** *****

SEQ2 1839 IPPGECFGLLG VNGAGKTSTFRMVTGDTLPSSGEAVLAGHNVAQERSAAH 1888
 SEQ5 1817 IPPGECFGLLG VNGAGKTSTFRMVTGDTLASRGEAVLAGHSVAREPSAAH 1866
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SEQ2 1889 RSMGYCPQSDAIFDLLTGREHLELFARLRGVPEAQVAQTALSGLVRLGLP 1938
 SEQ5 1867 LSMGYCPQSDAIFELLTGREHLELLARLRGVPEAQVAQTAGSGLARLGLS 1916
 *****.***** ***** ***** *

SEQ2 1939 SYADRPAGTYSGGNKRKLATALALVGDPVAVFLDEPTTGMDPSARRFLWN 1988
 SEQ5 1917 WYADRPAGTYSGGNKRKLATALALVGDPVAVFLDEPTTGMDPSARRFLWN 1966

SEQ2 1989 SLLSVVREGRSVVLTSHSMEECEALCTRLAIMVNGRFRCLGSSQHLKGRF 2038
 SEQ5 1967 SLLAVVREGRSVMLTSHSMEECEALCSRLAIMVNGRFRCLGSPQHLKGRF 2016
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SEQ2 2039 GAGHTLTLRVPPDQPEPAIAFIRITFPGAELREVGSRRLRFQLPPGGRCT 2088
 SEQ5 2017 AAGHTLTLRVPAARSQPAAAFVAAEFPGSELREAHGGRLRFQLPPGGRCA 2066
 ***** . . ** ** . *** . ***** ** *****

 SEQ2 2089 LTRVFRELAAQGRAHGVEDFSVSQTTLEEVFLYFSKDQGEEEESSRQ-EA 2137
 SEQ5 2067 LARVFGELAVHGAEHGVEDFSVSQTMLEEVFLYFSKDQ GKDEDTEEQKEA 2116
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 SEQ2 2138 EEEEVSKPGRQHPRVSRFLEDPSSVETMI 2167
 SEQ5 2117 GVGVDPAAPGLQHPRVSRFLEDPSTAETVL 2146
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